Technical Data

Hybrid Inverter Three Phase 15kW / 20kW

Model	SUN-15K-SG05LP3-EU-SM2	SUN-20K-SG05LP3-EU-SM2
SKU	12650	12651
Battery Input Data		
Battery Type	Lead-acid or Lithium-ion	
Battery Voltage Range (V)	40-60	
Max. Charging Current (A)	280	350
Max. Discharging Current (A)	280	350
Charging Strategy for Li-ion Battery	Self-adaption to BMS	
Number of Battery Input	2	
PV String Input Data		
Max. PV Access Power (W)	30000	40000
Max. PV Input Power (W)	24000	32000
Max. PV Input Voltage (V)	800	
Start-up Voltage (V)	160	
MPPT Voltage Range (V)	160-650	
Rated PV Input Voltage (V)	550	
Max. Operating PV Input Current (A)	36+36	
Max. Input Short-Circuit Current (A)	54+54	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2	
AC Input/Output Data		
Rated AC Input/Output Active Power (W)	15000	20000
Max. AC Input/Output Apparent Power (VA)	16500	22000
Rated AC Input/Output Current (A)	22.8/21.8	30.4/29
Max. AC Input/Output Current (A)	25/24	33.4/31.9
Max. Continuous AC Passthrough (grid to load) (A)	70	
Peak Power (off-grid) (W)	2 times of rated power, 10s	
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range (V)	220/380V, 230/400V 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65	
Grid Connection Form	3L+N+PE	
Total Current Harmonic Distortion THDi	<3% (of nominal power)	
DC Injection Current	<0.5% In	
Efficiency		
Max. Efficiency	97.6%	
Euro Efficiency	97.0%	
MPPT Efficiency	>99%	
Equipment Protection		
Integrated	DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection	
Surge Protection Level	TYPE II(DC), TYPE II(AC)	
Interface		
Communication Interface	RS485/RS232/CAN	
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)	
General Data		
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating	
Permissible Ambient Humidity	0-100%	
Permissible Altitude	3000m	
Noise (dB)	<60	
Ingress Protection(IP) Rating	IP 65	
Inverter Topology	Non-Isolated	
Over Voltage Category	OVC II(DC), OVC III(AC)	
Cabinet Size (WxHxD mm)	456×750×268.5 (Excluding Connectors and Brackets)	
Weight (kg)	51.9	
Type of Cooling	Intelligent Air Cooling	
Warranty	7years (5yrs standard +2yrs extendable) the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy	
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105	
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	